

Proposal for District Technology Training Programs

Prince George's County Public Schools

2014-2015 School Year

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Prince George's County Public Schools: Biographical Information

With over 9,000 teachers serving over 125,000 students in 205 schools, Prince George's County Public Schools is one of the top 25 largest school districts in the county, as well as the second largest in the state of Maryland. In the 2013-2014 school year, PGCPs had an operating budget of \$1.6 billion. The Prince George's County Public School system sits adjacent to Washington D.C., and as such serves a highly and highly diverse population. With approximately 880,000 residents among 300,000 households, the school system operates in a highly populated district outside of the U.S. Capitol. The Prince George's County Board of Education will advance the achievement of its diverse student body through community engagement, sound policy governance, accountability, and fiscal responsibility ("About PGCPs", 2014).

Prince George's County Public Schools is a system dedicated to the advancement of technology in the field of education. All students, parents and teachers are connected to our student information system, SchoolMax, allowing all stakeholders to monitor student success from any Internet-connected device. All students are assigned a Google-based email account on the county servers, offering students a safe and secure email system with the advanced productivity tools offered by Google. All teachers are assigned a high-powered laptop for instructional and administrative purposes. All schools are outfitted with wireless internet connectivity. Several schools have 1:1 ratio Chromebooks and iPads. All schools are equipped with modern computer labs, including mobile laptop labs. Many of our schools have Promethean boards or interactive whiteboard systems installed in a majority of their classrooms. Teachers are also offered many opportunities for training with new technology and new software through the Electronic Registrar Online system. During the 2014 school year, the Prince George's County Public School allotted over \$122 million toward technology in services, applications and operations, amounting to 7% of the overall operating budget, or approximately \$900 per student (PGCPs Board of Education, 2013)

County-Wide Technology Assessment

Although Prince George's County Public Schools has an admirably large budget, much of which is devoted to spending on technology in various formats, there are still many technology needs which must be addressed. While PGCPs does have a burgeoning technology background and a growing interest in technology, many of the teachers and students in the county still access to many technological innovations and resources which might aid in the educational process. Likewise, a majority of educators in the county lack the training to consider the best ways to utilize the technology that is currently available. There is also a significant lack of detail regarding the type of resources available in the schools and the amount of preparation teachers and students have had when it comes to using the resources that are there.

Renee Henderson, who has served as an Instructional Technology Coordinator with the county for over 12 years, has had the opportunity to assess the different technology needs within the county. She has also been intimately involved with many technology initiatives and has been able to provide particularly focused perspective on the technology needs in the PGCPs. The following details highlight some of the specific technology issues Mrs. Henderson has identified that currently exist within the system (R. Henderson, personal communication, June 17, 2014):

- While some schools have 1:1 iPads and Chromebooks, this accounts for fewer than 25% of the schools, and is mostly at the elementary school level or within specialty programs, such as the International Baccalaureate Program at Central, Crossland, Laurel, Parkdale and Suitland High Schools.
- There is an overwhelming apprehensiveness toward using technology within the classroom at the high school level. The majority of high school teachers are either afraid or unwilling to utilize different technology tools for educational purposes.
- Only around 25% of the teachers in each school could be considered "technology-literate". Another 50% could be considered as middle ground technology users, while the final 25% could be considered "technology averse".
- Teachers at the elementary school level are much more likely to be open toward technology usage and training than high school teachers.

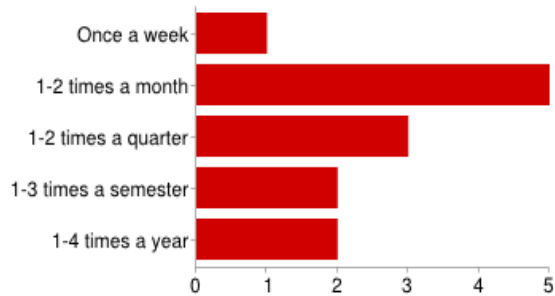
- Scheduling training for teachers can be overwhelmingly difficult. Gaining access to teachers can be a challenge, and training is often dependent upon the teachers. The only good times for training throughout the year are after school or during teachers' planning. Principals have often been roadblocks in this regard. While they value their teachers' time for planning and educational activities, they often do not perceive the necessity of technology training.
- The number of technology specialists per teacher is low for a county of our size. There is only one instructional technology specialist for every 14-15 schools. This imbalance leads to an impossibility of seeing every teacher and every school even a minimum of once during the school year.

Mrs. Henderson has explained that while she has the opportunity to meet with around 75-100 teachers on a weekly basis, often these are the same teachers within the same schools. She has expressed some frustration with trying to schedule workshops within schools where principals are unwilling to give the time, either during school or after school.

It is clear from Mrs. Henderson's personal experience and perspective that while our technology spending may indeed represent a significant portion of our per-student spending (approximately 30% based on current Student Based Budgeting per pupil spending) (PGCPS Board of Education, 2014, p. 66), it is clear that those dollars are not translating directly enough into real and tangible modernization of our teachers' classroom technology skills or the proper utilization of the resources with which the money is going. Our teachers not only need training on how to use technology but at the very center of the issue lies the need to get a vast majority of our teachers but interested in and understanding why technology can and should be used in the classroom for instructional purposes.

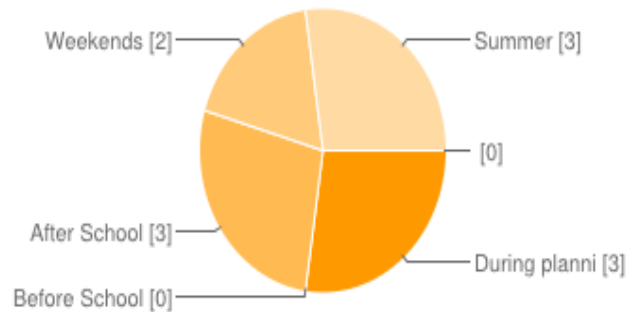
Technology and Training Needs

Two surveys of current Prince George's County Public Schools teachers revealed some key needs regarding both the training needs and interests of our teachers. A short survey on [teacher knowledge of Acceptable Use Policies](#) revealed that a majority of teachers (83%) possess little to no knowledge of the county's AUP. This is particularly troubling, given the proliferation of devices accessing county network resources as well as our continued progression toward



increasing technology use among teachers and students for educational purposes. Another survey covering [technology training](#) found that teachers are most interested in learning more about interactive whiteboards, mobile technology in the classroom, Google Docs, student response systems, and digital storytelling. Most of these teachers would prefer to

have trainings during their planning periods, after school, or during the summer time, and a majority would prefer to have training opportunities made available once or twice a month. Finally, a majority of teachers reported that they are “very likely” to attend a training opportunity if it is offered at a time convenient to them.



The interest among our teachers in learning various technology applications is high. Not only do we have the imperative to ensure that all of our teachers have access to training, we need to be cognizant of the type of training that we are offering, and the times when we are offering those training opportunities as well. If we want to maximize both the number of trainings that teachers are attending as well as the actual benefit that we are seeing from these trainings, we need to target specifically what teachers believe will be most effective in their classrooms. We need to remember that nobody knows what works best in their classes than the teachers themselves, and our training decisions need to come directly from the teachers who work with our students on a

daily basis. The following are some specific training recommendations based on the above survey results:

1. Provide training on interactive whiteboard/Promethean board uses.

This training will cross all grade levels (k-12) and specialty programs, but should only be offered to teachers who have or will have an interactive whiteboard or a Promethean board installed in their classroom. In particular, trainings should focus on software available for the devices, in-class applications of the devices and on designing lessons which fully utilize the interactive and touch-capable features of the devices.

2. Provide training on Google Docs.

Prince George's County Public Schools is officially a Google district. Our email servers are Google-based, and all staff members and students have a Google-based email. As with personal Google emails, these come with the innovative Google Drive and all Google Docs applications. Teachers should be trained on the many various capabilities of Google Docs. Because there are so many options available in Google Docs, extensive training options should be made available for each individual option available from Google Docs. A basic Google Docs overview should be made mandatory for all teachers, but more specialized trainings for various applications should be made available per teacher interest.

3. Provide training on mobile technology integration.

While a true 1:1 model is prohibitively expensive in a district of our size, many schools have 1:1 technology programs. While our district also currently has one of the strictest regulations on students using mobile technology in schools, recent considerations by the school board has indicated a reasonable change in policy (Wiggins, 2014, para. 1). With this change will also come Bring Your Own Device policies, which can help close the gap between the student/computer ratios which currently exists? Teachers interested in best utilizing the increase in mobile technology and who want to learn how to best use

not only their mobile devices but the mobile devices students bring with them will benefit from these workshops.

4. Provide training on multimedia presentation software.

While almost all of our teachers use PowerPoint on a least a daily basis, the presentation software options have grown tremendously in the past 10 years. Training on the many options available to teachers for presenting information in unique ways within the classroom should be made available. Given the vast number of presentation software options, these trainings should be based on not only the usage of popular software applications, but open to teachers to share best practices with the software that they use and find successful in their classrooms.

5. Provide training on student response systems.

Student response systems have traditionally come in the form of infrared-based clicker systems which record student responses on multiple choice questions. The data is recorded for teachers to show and use immediately. However, technological advances have resulted in many student response systems available free or for low cost online, and can be used with any mobile device or computer. Teachers interested in collected immediate data from students during lessons can benefit from these systems. The move toward loosening the strict mobile device ban in the county will open up a new realm of interactivity in the classroom with mobile device based systems.

6. Provide training on learning management systems.

While the county currently maintains an active and required student information system, these provide limited information and interactivity for students. Learning management systems, such as Edmodo or MyBigCampus, offer a way for teachers to take all aspects of their classes online without needing and programming skills. Teachers have expressed interesting in learning more about the various learning management systems involved, and can benefit from workshops on how to set them up and incorporate them into daily use within the classroom. These systems and workshops will focus primarily on middle

school and high school teachers, where it is much more feasible to expect students to use computers independently on a regular basis both inside and outside of the classroom.

7. Provide training on digital storytelling.

Digital storytelling involves using software to create interactive, multimedia stories related to personal experiences. Digital storytelling has found a lot of success among elementary school teachers, where storytelling plays a key role in the educational process. Providing workshops which cover different digital storytelling techniques as well as software available to create these stories would be beneficial for teachers and likely attract a large crowd.

8. Offering training opportunities during planning periods in all schools.

Teachers surveyed identified planning periods as one of the preferred times to offer training activities. The district must work to coordinate with instructional technology specialists, principals and administrators to ensure that all schools are able to offer trainings during planning periods.

9. Offering training opportunities after school in all schools.

Teachers surveyed identified after school as another preferable time for training. The district must work to coordinate with instructional technology specialists, principals and administrators to ensure that all schools are able to offer after school training workshops. This is also the best time to hold mandatory workshops.

10. Offer training opportunities during the summer months.

Teachers surveyed identified the summer vacation months as another preferable time for training. The district must work to coordinate with instructional technology specialists, principals and administrators to gauge when are the best times during the summer months to host training workshops.

11. Ensure that all teachers attend a required Acceptable Use Policy training.

The board approved Acceptable Use Policy exists to ensure that all teachers, students and staff understand both their rights and responsibilities, both moral and legal, when using district resources. To that end, a training workshop on the county's AUP must be a requirement, and should occur early in the school year. Preferably, this should occur during the teacher preparation week before school begins.

12. Ensure that all teachers have at least one required Google Docs training.

Prince George's County Public Schools is officially a Google district. We pay for Google-based services which are made available to all teachers, students and staff through Google email accounts. While the use of the county-administered email for official communications is a requirement, teachers should undergo a mandatory training of the options available to them with their Google-based email accounts. A basic overview of Google Docs should take place early in the school year. Preferably, this should occur during the teacher preparation week before school begins.

13. Ensure that data is gathered on the effectiveness of all training.

It is not enough that we hold training workshops regularly throughout the year on different technology-related topics. We need to ensure that data on the effectiveness of those workshops is also gathered. Workshop leaders need to have mandatory post-workshop surveys for each workshop given, as well as collect tangible products from teachers who attend the workshops as proof of both workshop attendance and activity.

14. Ensure that follow-up is given for all trainings.

In order to obtain data on the success of the training workshops we are giving, we must provide on-going follow-up with trainees throughout the school year. Each training workshop should be followed up with data collected from teachers on the way in which training workshop knowledge is being used, and should include at least once follow-up workshop for each and every training session.

Our primary goal for training should be to ensure that we are meeting the needs of our students, meeting the needs and interests of our teachers, and gathering and utilizing data on the effectiveness of the technology training and use within the district. It is not enough for us to simply offer training. We must also look for trends which help inform us of the effectiveness of the training, the usefulness of the resources offered, and the impact that teachers are having on their students through the use of technology integration techniques.

Who should be trained?

Based on the personal experience provided by Ms. Henderson, technology training is needed for teachers across the board. While there are some teachers that do have significant amounts of personal experience, many lack the experience, confidence or both to properly incorporate technology into the class. This appears to be particularly true of high school teachers, where the apprehensions toward using technology for educational purposes appears to be met with a lasting level of apprehension. Based on data from the 2013 Maryland Report Card for Prince George's County, the majority of teachers within PGCPs have an Advanced Professional Certificate (65.6%), and the majority of the remaining teachers have a Standard Professional Certificate (26.7%), (Maryland State Department of Education, 2013). This means that the majority of teachers within the county have a minimum of education related Master's degrees. While specific information is not publicly available, a clear conclusion can be drawn: the majority of teachers within the system have over 5 years of experience, and possess some background knowledge in pedagogical theories.

Our most recent technology plan (Division of Information Technology, 2008), designed for 2008-2012, identifies different technology training goals for our teachers. While no specific examples of instructional technology programs and/or hardware are listed, most technology objectives within the plan identify "all staff" or "instructional staff" as those among the target audience. Assuming that we have achieved these goals, those teachers who have been with the

system since at least 2008 have had the opportunity to get some training on instructional technology. Of the instructional technology goals written into the plan, 16 target teachers of all varieties, with one specific to new teachers alone (PGCPS Division of Information Technology, 2008, p. 27-38)

The reality of our current teaching staff is this: most teachers have not been required to learn to use instructional technology of any sort, regardless of the training we have offered in the past. The current state of teacher preparation programs on both the undergraduate and graduate level should award us no expectation that our teachers come in with any knowledge of instructional technology beyond the knowledge that it *exists*. Finding teacher preparation programs that even has instructional technology as a core requirement of their instructional program is a rare occurrence. In their 2013 Teacher Prep Review, The National Council on Teacher Quality (NCTQ) made only one, small mention of instructional technology: as a summarization on areas in which they are currently investigating for future reviews (Greenberg, McKee and Walsh, 2013). Even Top-tier colleges and universities such as Harvard University make no mention of instructional technology as part of their undergraduate teacher programs (“Harvard Undergraduate Teacher Education Program”, 2010). As a result, we can surmise several key groups which will likely need technology training in the more immediate future:

- **New Teachers (0-2 years of experience):** This group will be key. Most new teachers are coming directly from undergraduate programs. Only 2.6% of our teachers are career changers going through the alternative Resident Teacher program (Maryland State Department of Education, 2013). Due to the above-mentioned findings on teacher programs lacking instructional technology focuses, we should have no expectation that the younger generation of teachers will also inherently possess knowledge regarding using technology for instructional purposes.
- **Older teachers (20+ years of experience):** While this group will be highly experienced in most aspects of the teaching process, and will typically provide excellent learning experiences for our students, they also represent a group who, for the most part, will have had much less experience with 21st instructional technology. Our county’s most recent

updated technology plan is already 2 years old. There is no language written into the language of the technology plan which made the training a requirement or that utilizing technology is a requirement for teacher evaluations. To that end, we cannot hold any expectation that our more experienced teachers also have a high level of experience with instructional technology integration.

The experience given to us by Ms. Henderson is highly valuable. While we know that technology training opportunities exist, and that at least a standard, workable level of technology resources exists within the county, far too many of our teachers are highly apprehensive toward using what is available, or even learning how to use what is available.

Goals and Objectives

The Course Offerings in the next section will cover, in detail, 7 specific courses which cover a wide range of technology integration options and technology needs. As a district, we should have clear goals based on reasonable, achievable and measureable objectives. These goals and objectives should be informed, and based on the technology goals found in the Maryland Teacher Technology Standards (Tanney, 2002).

The following primary objective for teachers comes directly from the 2008-2012 Technology Plan (Division of Information Technology, 2008) that was approved and implemented from during that same time frame. The previous technology plan, while it has not yet been updated, still possesses a very clear objective for teachers which we should continue to pursue. Specific goals based on the objective have been added for this District Technology Training Program proposal.

Primary Objective: Improve staff's knowledge and skills to integrate technology into instruction. (Source: 2008-2012 PGCPs Technology Plan)

1. Teachers should be expected to increase their knowledge of technology integration methods.
2. Teachers should be expected to incorporate technology into their instruction on an observably regular basis, as determined by individual school administrative staff.
3. Teachers should be expected to integrate technology knowledgeably and with a high level of expertise.
4. Teachers should be expected to have comprehensive knowledge of PGCPs acceptable use policies and procedures.
5. Teachers should be expected to have comprehensive and demonstrable knowledge of resources available within the PGCPs Google-based email account, and make regular use of these resources for official business.
6. Teachers should be expected to master at least one technology integration strategy and attend on-going sessions and follow-up for this technology strategy over the course of the school year.

Course Offerings

The courses offered for teachers should be specific to both the needs identified from the surveys and the interests that teachers have expressed. The following course possibilities should be seriously considered when designing upcoming training options for teachers.

Course Title	Course Description	Responsible Group	Target Audience	Assessment Indicator
Putting the “Interactivity” in Interactive Whiteboards (5 day course)	Teachers will gain experience using interactive whiteboards and Promethean boards. Teachers will learn about available software designed to enhance interactive whiteboard/Promethean board use, discover teaching strategies for interactive whiteboard/Promethean boards, and practice creating lessons and activities which fully utilize the hardware in a “proof-of-concept” manner.	Instructional Technology Specialists Administrators	K-12 teachers	Pre-workshop survey Post-workshop survey Submission of completed product Follow-up, in-class observations of select workshop participants
Powering up Presentations with Web 2.0 Presentation Software (5 day course)	Using multimedia theories, teachers will examine and create multimedia presentations using select presentation software. Featured software to include Prezi, PhotoPeach, PowToon, Emaze, VoiceThread and others. Teachers will 2-3 programs featured, with time to share and collaborate on design and function. Volunteer teachers will assist in running workshops by showing best practices	Instructional Technology Specialists Administrator Volunteers Teacher Volunteers	K-12 teachers Administrators	Pre-workshop survey Post-workshop Submission of completed product

	with different presentation software and presentation methods.			Follow-up, in-class observations of select workshop participants
Getting the Most from Google Docs (5 day course)	This mandatory training will take teachers through an overview of the different features available from their Google-based email accounts. Teachers will have the opportunity to work hands on with various Google Docs applications, including Forms, Documents, Presentation and Spreadsheets.	Instructional Technology Specialists Administrators Teacher Volunteers	K-12 Teachers	Pre-workshop survey Post-workshop survey
Mobile Technology in the 21 st Century Classroom (5 day course)	Teachers will have the opportunity to examine theories behind and current practices with mobile technologies in the classroom. Teachers will examine educational productivity software applications such as Evernote, student response software such as Socrative, and will explore the educational possibilities that can be unlocked with technologies specific to mobile devices such as QR codes.	Instructional Technology Specialists Teacher Volunteers	High School Teachers with 1:1 laptop/tablet classrooms or Bring Your Own Device classrooms	Pre-workshop survey Post-workshop survey Follow up, in class observations of select workshop participants
Getting to Know the Acceptable Use Policy (1 day course)	This mandatory workshop will give teachers an overview of the Acceptable Use Policy. Teachers will examine the legal and moral purposes behind the policy, as well as the limitations and freedoms provided by it.	Administrators	K-12 Teachers	Pre-workshop survey Post-workshop survey

<p>Telling a Good Story: Using Technology to Tell Unique Stories (5 day course)</p>	<p>Teachers will learn about digital storytelling in this workshop. Workshop lecturers will lead teachers through different software that can be used to tell unique and interesting stories, as well as examining the connection between storytelling and engagement. Software to include such things as Prezi, Pow Toon, Inklewriter, PowerPoint, Cartoonist and MapSkip. Teacher volunteers will share their own examples of digital storytelling best practices from their classes.</p>	<p>Instructional Technology Specialists Teacher Volunteers</p>	<p>K-8 Teachers</p>	<p>Pre-Workshop survey Post-workshop survey Follow up, in class observations of select workshop participants</p>
<p>Always On: How Learning Management Software Take us Beyond the Four Walls (5 day course)</p>	<p>This workshop will examine the recent occurrence of learning management software and their applications in and outside of the classroom. In particular, this workshop will focus on how teachers can utilize free website services such as Edmodo and MyBigCampus to create fully interactive class websites which take learning beyond the four walls and beyond the school day. Teachers taking this workshop will create accounts and online classrooms as well as learning strategies for integrating learning management software into class on a regular basis.</p>	<p>Instructional Technology Specialists Teacher Volunteers</p>	<p>K-12 Teachers</p>	<p>Pre-Workshop survey Post-workshop survey Follow up, in class observations of select workshop participants</p>

Suggested Instructional Strategies for Workshops

As a teacher with 7 years' of successful teaching experiencing integrating technology in the classroom, there are some key strategies which I believe will be most successful in not only spurring a deep-rooted interest in the technology applications, software and hardware available to teachers, but should also aid greatly in ensuring that our teachers are using the resources available to them both during and after the workshops. Mrs. Renee Henderson has also been an integral part of the process, providing keen insight into methods that she has found success with as long-time instructional technology specialist with Prince George's County. The following suggestions highlight some of the strategies which should be incorporated into the workshops if they are to be successful with our teachers.

1. Provide hands-on instruction.

It's not enough for us to simply present information on the use of a specific technology or technology integration strategy. We must have teachers work directly with that technology or method so that they get a full understanding of the experience. Requiring all teachers to bring their county-issued laptops to workshops is a necessity, and ensuring that all wifi networks are fully operational is important.

2. Utilize teachers with intimate experience with the technology.

Teacher's learn best when they learn from each other. To that end, it is important that we bring in teachers who have experience using the different technology and technology integration strategies portrayed all of the workshops. While the workshops should be primarily run and the instructional technology specialists, teacher leaders will play a key role in providing real-world examples and best practices for how these technologies and integration methods work in actual classrooms.

3. Incorporate collaborative activities.

While workshop participants will be expected to be able to use the technologies and integration strategies independently in their own classrooms, creating a collaborative workshop experience will help teachers of different technical skills work out issues that

might be encountered during the process. This coincides with including teacher leaders in each of the workshops. Gauging the experience levels before the workshop begins can be an effective way to group teachers of different skill levels during the actual workshop.

4. Require participants to produce a tangible product.

While we shouldn't be expecting perfection or anything close to it during the workshops, we should expect that workshop participants are able to create a workable "proof-of-concept" by the end of each workshop session. If these are paid workshops, tying this tangible product in as part of gaining pay for the workshop should add incentive.

5. Ensure time for participants to present their work and receive expert feedback.

It is incredibly important to provide time during the workshops for participants to show what they have produced as a result of what they have learned during the workshop. This should also include a time for constructive feedback from technology specialist running the workshop, as well as from teacher leaders and other colleagues in the workshop. A successful.

6. Provide both good and bad examples.

Providing workshop participants with examples of what works is always important, but giving them examples of what does not work is just as important. Workshop participants should be given the opportunity to not only learn what works and why, but also have the opportunity to apply that knowledge to critique non-examples of good technology usage or technology integration strategies.

7. Include pre-workshop surveys as well as follow-up surveys and observations.

We must remember that a workshop is only a one-time thing. To best ensure that our workshops are successful, we must get measureable feedback from workshop participants. This begins before the workshop by gauging teacher knowledge of the skill or technology in question, followed up with surveys after the workshop and usage observations of volunteer teachers to the technologies and skills are being used.

Workshop Sample

Five Day Workshop

Web 2.0 Presentation Software Programs



VOICETHREAD



FOR LEARNING

“Powering up Presentations with Web 2.0 Presentation Software”

Technology Workshop Lesson Plan		
Instructor: Samuel Cook	Powering Up Presentations with Presentation Software	Day: One
Subjects: <ul style="list-style-type: none">• Introduction to Multimedia Learning Theory• Presentations from a Master Teacher• Beginning hands on experience with either Prezi,Emaze, PhotoPeach, Powtoon, VoiceThread or any other Web 2.0 based software program.	Prerequisites Knowledge: <ul style="list-style-type: none">• A basic understanding of presentation software functionality.• A basic understanding of Web 2.0 programs.• Knowledge of basic computer functionality.• Pre-workshop survey should have been completed prior to attending the workshop.	
Workshop Content: <p>During this session, teachers will gain the opportunity to learn about and experience firsthand various theories behind multiple learning, with an emphasis on the Multimedia Principle and other theories behind learning using various types of information in a presentation. Teachers will examine these principles in action by viewing and discussing rady-made presentations which use software that will be covered over the course of the 5 day workshop. In particular, teachers will look at both examples of good and bad multimedia presentation designs. Finally, teachers will work both collaboratively and individually to put together an initial multimedia presentation using a program that they <i>have not used in the past</i> or have <i>only limited experience with</i>.</p>		
Lesson Objectives: <ul style="list-style-type: none">• Given a detailed overview of the Multimedia Principle, teachers participating in the first day’s workshop will be able to use Prezi’s presentation search engine to locate, examine and positively identify at least one example of a presentation which correctly uses the Multimedia Principle.• Given an example of a multimedia presentation delivered by a Master Teacher, teachers participating in the first day’s workshop will work collaboratively to identify and discuss no less than 3 different and unique uses of the Multimedia Principle.		

- Given several pre-selected Web 2.0 presentation software examples, teachers participating in the first day's workshop will work independently to examine two specific websites they plan to utilize over the course of the 5 day workshop and provide rationale for their interest by completing a mid-session survey on Google.
- Using their county-issued computers, teachers participating in the first day's workshop will create and present an initial example of a multimedia presentation using one Web 2.0 presentation software website presented during the session.

Workshop Delivery:

- The workshop will begin with an introduction to Web 2.0 software and multimedia presentations. The presenter will utilize a PowToon presentation to outline the basic concepts that will be examined and practiced during the 5 hour session (Multimedia Principle, Web 2.0 Software examples).
- The presenter will show a slide from a Prezi presentation that include images, video and text. The slide will play through, and teacher participants will be asked to identify the different categories of information being presented within the Prezi slide. After discussion, the presenter will use this as a segue into a short presentation on the Multimedia Principle, with an emphasis on the importance of including a mixture of images, video and text or just text in a presentation.
- The presenter will ask teachers to create a free account on Prezi.com. This should take no more than a few minutes. Using Prezi's "explore" option, teachers should search for a topic or lesson that interests them and is applicable to their grade level and subject area. Teachers will examine this Prezi presentation, and will identify, share and discuss one way the presentation follows the Multimedia Principle.
- The Master Teacher will give a quick presentation of a lesson he/she successfully designed and delivered to a class within the past 6 months. Teachers will work collaboratively in groups to discuss and identify 3 specific ways in which the Master Teacher's presentation successful uses the Multimedia Principle. Groups will report and discuss their findings
- The workshop presenter will give teachers an overview of the select presentation software that they will be asked to practice during the 5 day workshop: Prezi, PhotoPeach, Emaze, VoiceThread and PowToon. Other options may be added based on a pre-workshop survey given to workshop participants. Teachers will review the different options by examining the websites, then complete a mid-session survey sent to them which identifies the 2 specific presentation software they intend to focus on during the 5 day workshop. Teachers should be sure to provide rationale for their choices.
- Teachers will select one of their two chosen software and create an initial presentation which follows the Multimedia Principle. This presentation should exhibit the Multimedia Principle in some way, should be shared with the workshop presenter, and should be uploaded/shared to the other workshop participants. Select workshop participants will share their initial presentation, with an explanation of why they chose the software and in what way their presentation fits the Multimedia Principle.

<ul style="list-style-type: none"> Teachers will complete a post-workshop survey available online to assess knowledge gained through the workshop and provide effective feedback for the upcoming sessions.
<p>Additional Materials:</p> <ul style="list-style-type: none"> An interactive whiteboard or Promethean board should be available to display the interactivity of the presentation software. Google forms for the pre-workshop, mid-workshop and post-workshop surveys should be prepared and either emailed out before the workshop begins or during the appropriate sections of the workshop. A wiki page or website for the workshop will be prepared ahead of time for teachers to follow along and maintain focus on specific workshop sections, expectations and timelines.
<p>Workshop Evaluation Strategies</p> <ul style="list-style-type: none"> All teachers will be required to submit a pre-workshop, mid-workshop and post-workshop survey to identify learning, effective progress and necessary changes or additions to the workshops Teachers will be required to submit a tangible proof of concept at the end of the sessions. This submission should be a link to the location of the presentation created at the end of the session, with a clearly identified explanation of how the presentation fits the Multimedia Principle. The workshop presenter and Master Teachers should keep an accurate record of the type of questions asked, and the responses/assistance given during the session

Technology Workshop Lesson Plan		
Instructor: Samuel Cook	Powering Up Presentations with Presentation Software	Day: Two
Subjects: <ul style="list-style-type: none">• Introduction to Contiguity Principle• Presentations from a Master Teacher• Continuing hands on experience with self-selected presentation software from instructor provided resources (Prezi, VoiceThread PhotoPeach, Emaze, PowToon)	Prerequisites Knowledge: <ul style="list-style-type: none">• Attendance to workshop day one session.• A basic understanding of Web 2.0 programs.• Knowledge of basic computer functionality.• Post-workshop survey from day one session should have been completed.• Basic knowledge of the Multimedia Principle.• Example of multimedia presentation from day one session.	
Workshop Content: <p>During this session, teachers will gain the opportunity to learn about and experience firsthand various theories behind multiple learning, with an emphasis on the Contiguity Principle and other theories behind learning using various types of information in a presentation. Teachers will examine these principles in action by viewing and discussing ready-made presentations which use software that will be covered over the course of the 5 day workshop. In particular, teachers will look at both examples of good and bad multimedia presentation designs. Teachers will work collaboratively to examine presentations with both good and bad examples of the Contiguity Principle. Teachers will revise the presentation they created from the day one session and update it to fit the Contiguity Principle. Finally, teachers will examine the collaborative features in Prezi to both edit and create a presentation on an instructor-selected topic.</p>		
Lesson Objectives: <ul style="list-style-type: none">• Given a detailed overview of the Contiguity Principle, teachers participating in the second day’s workshop will be able to use the SlideShare search function to find both find and examine a presentation that possesses no less than 3 slides following the Contiguity Principle.• Given an example of a multimedia presentation using the Contiguity Principle delivered by a Master Teacher, teachers participating in the second day’s workshop will work collaboratively to identify and discuss no less than 3 different and unique uses of the Contiguity Principle.		

- Using their presentation from the first day's workshop, teachers will edit existing slides to match the Contiguity Principle, and add 2 additional slides that fit both the Multimedia Principle and the Contiguity Principle.
- Using their the Prezi software's collaborative editing feature, teachers participating in the second day's workshop will work with instructor-selected small groups based on content and grade level to create and then present a 5 slide presentation that fits both the Multimedia Principle and the Contiguity Principle.

Workshop Delivery:

- The workshop will begin a review of the Multimedia Principle. The workshop presenter will deliver a review of the main concepts from the previous workshop by delivering slide examples from presentations made during the first day's session by teacher participants.
- The presenter will review the post-workshop survey results from the first day's workshop. The presenter will hold discussion on any lingering questions or problems identified in the survey.
- The presenter will show a PowToon presentation that exhibits the Contiguity Principle. The presentation will play through to the end, and teacher participants will be asked to identify the different categories of information being presented within the Prezi slide. After discussion, the presenter will use this as a segue into a short presentation on the Contiguity Principle, with an emphasis on the importance of aligning images with text and the importance of text location regarding images used within the presentation.
- The presenter will ask teachers to create a free account on PowToon. This should take no more than a few minutes, if it has not already been done. Using Prezi's search option, teachers should search for a topic or lesson that interests them and is applicable to their grade level and subject area. Teachers will examine this PowToon presentation and will identify, share and discuss one way the presentation follows the Multimedia Principle.
- The Master Teacher will give a quick presentation of a lesson he/she successfully designed and delivered to a class within the past 6 months. Teachers will work collaboratively in groups to discuss and identify 3 specific ways in which the Master Teacher's presentation successful uses the Contiguity Principle. Groups will report and discuss their findings.
- Teachers will review the presentation they created at the end of the first day's workshop. Teachers will update their presentation by both editing the existing slides to fit the Contiguity Principle, as well as adding two more slides which fit the Contiguity Principle.
- The presenter will place teachers in pre-selected groups based on teacher grade levels, content areas and interests. This will be based on data provided from the pre-workshop survey. Using Prezi's collaborative editing feature, teachers will create and present a 5 slide presentation that follows the Contiguity Principle and the Multimedia Principle.

<ul style="list-style-type: none"> Teachers will complete a post-workshop survey available online to assess knowledge gained through the workshop and provide effective feedback for the upcoming sessions.
<p>Additional Materials:</p> <ul style="list-style-type: none"> An interactive whiteboard or Promethean board should be available to display the interactivity of the presentation software. Google forms for the pre-workshop, mid-workshop and post-workshop surveys should be prepared and either emailed out before the workshop begins or during the appropriate sections of the workshop. A wiki page or website for the workshop will be prepared ahead of time for teachers to follow along and maintain focus on specific workshop sections, expectations and timelines.
<p>Workshop Evaluation Strategies</p> <ul style="list-style-type: none"> All teachers will be required to submit a post-workshop survey to identify learning, effective progress and necessary changes or additions to the workshops Teachers will be required to submit a tangible proof of concept at the end of the sessions. This submission should be a link to the location of the presentation created at the end of the session, with a clearly identified explanation of how the presentation fits the Contiguity Principle. The workshop presenter and Master Teachers should keep an accurate record of the type of questions asked, and the responses/assistance given during the session

Technology Workshop Lesson Plan		
Instructor: Samuel Cook	Powering Up Presentations with Presentation Software	Day: Three
Subjects: <ul style="list-style-type: none">• Introduction to Modality Principle• Presentations from a Master Teacher• Continuing hands on experience with self-selected presentation software from instructor provided resources (Prezi, VoiceThread, PhotoPeach, Emaze, PowToon)	Prerequisites Knowledge: <ul style="list-style-type: none">• Attendance to all previous sessions.• A basic understanding of Web 2.0 programs.• Knowledge of basic computer functionality.• Post-workshop surveys from day and two sessions should have been completed.• Basic knowledge of the Multimedia Principle and the Contiguity Principle• Updated example of self-made presentation from previous sessions	
Workshop Content: <p>During this session, will gain experience with the Modality Principle. Teachers will examine this principle and previous principles in action by viewing and discussing ready-made presentations which use the software that has been exhibited over the past 2 sessions. In particular, teachers will look at both examples of good and bad multimedia presentation designs. Teachers will work collaboratively to examine presentations that show both good and bad examples of the Modality Principle. Teachers will utilize their second presentation software choice from day one to put into practice all three principles learned during the workshop up to this point. Teachers will work in groups to create a group presentation using VoiceThread that emphasizes the Modality Principle.</p>		
Lesson Objectives: <ul style="list-style-type: none">• Given a detailed overview of the Modality Principle, teachers participating in the third day’s workshop will be able to use the VoiceThread library to both find a presentation in their content area and examine the presentation by identifying 3 specific ways the presentation fits the Modality Principle.• Given an example of a multimedia presentation using the Modality Principle delivered by a Master Teacher, teachers participating in the third day’s workshop will work collaboratively to identify and discuss no less than 3 different and unique uses of the Modality Principle from the Master Teacher’s presentation.• Using either VoiceThread, Prezi or PowToon, teachers participating in the third day’s workshop will be able to use their choice of presentation software to create a multimedia presentation that has 3 slides that specifically exhibit the Modality Principle.		

- Using Voice Thread, Prezi or PowToon, teachers will work collaboratively to create a 5 slide presentation that uses all three principles covered during the past 3 workshop sessions.

Workshop Delivery:

- The workshop will begin a review of the Contiguity Principle and the Multimedia Principle. The workshop presenter will deliver a review of the main concepts from the previous workshop by delivering slide examples from presentations made during the first day's session by teacher participants.
- The presenter will review the post-workshop survey results from the second day's workshop. The presenter will hold discussion on any lingering questions or problems identified in the survey.
- Teachers will share how they have been using the lessons learned from the first day sessions of the workshops. Teacher volunteers will present examples of presentations they have created since the first workshop, emphasizing how they have incorporated the Multimedia and Contiguity Principles.
- Teachers will view a VoiceThread presentation prepared by the instructor covering the Modality Principle. Teachers will add their own comments to VoiceThread presentation's slide. The presenter will then overview The Modality Principle with the teachers, and review the slide and various teachers' comments from the presentation.
- The presenter will ask teachers to create a free account on VoiceThread. This should take no more than a few minutes, if it has not already been done. VoiceThread's library, teachers should search for a topic or lesson that interests them and is applicable to their grade level and subject area. Teachers will examine this VoiceThread presentation and will identify, share and discuss one way the presentation follows the Modality Principle.
- Teachers will complete a mid-workshop survey to gauge their understanding of the Modality Principle.
- The Master Teacher will give a quick presentation of a lesson he/she successfully designed and delivered to a class within the past 6 months. Teachers will work collaboratively in groups to discuss and identify 3 specific ways in which the Master Teacher's presentation successful uses the Modality Principle. Groups will report and discuss their findings.
- Using either Prezi, VoiceThread or PowToon, teachers will create a presentation which mimics one they have created within the past month. Teachers should utilize the same content from their previous presentation and update it using the Modality Principle.
- Teachers will complete a post-workshop survey available online to assess knowledge gained through the workshop and provide effective feedback for the upcoming sessions.

Additional Materials:

- An interactive whiteboard or Promethean board should be available to display the interactivity of the presentation software.

- Google forms for the pre-workshop, mid-workshop and post-workshop surveys should be prepared and either emailed out before the workshop begins or during the appropriate sections of the workshop.
- A wiki page or website for the workshop will be prepared ahead of time for teachers to follow along and maintain focus on specific workshop sections, expectations and timelines.
- Headphones for teachers to listen to audio presentations.
- Microphones for teachers who may have nonfunctioning or improperly functioning microphones.

Workshop Evaluation Strategies

- All teachers will be required to submit a post-workshop survey to identify learning, effective progress and necessary changes or additions to the workshops
- Teachers will be required to submit a tangible proof of concept at the end of the session. This submission should be a link to the location of the presentation created at the end of the session, with a clearly identified explanation of how the presentation fits the Modality Principle.
- The workshop presenter and Master Teachers should keep an accurate record of the type of questions asked, and the responses/assistance given during the session.

Technology Workshop Lesson Plan		
Instructor: Samuel Cook	Powering Up Presentations with Presentation Software	Day: Four
Subjects: <ul style="list-style-type: none">• Review of Multimedia, Contiguity and Modality Principles.• Presentation from Master Teacher.• Continuing hands on experience with self-selected presentation software from instructor provided resources (Prezi, VoiceThread, PhotoPeach, Emaze, PowToon).	Prerequisites Knowledge: <ul style="list-style-type: none">• Attendance to all previous sessions.• A basic understanding of Web 2.0 programs.• Knowledge of basic computer functionality.• Post-workshop surveys from day and two sessions should have been completed.• Working knowledge of the Multimedia, Contiguity and Modality Principles• Updated example of self-made presentation from previous sessions.	
Workshop Content: <p>During this session, teachers will work independently and in groups to prepare for the final sessions presentations. Teachers will review the core concepts that have been covered in the previous 3 workshop sessions. Teacher volunteers will present examples of lessons they have done since the previous sessions that incorporate the 3 principles that have been covered. The session’s Master Teacher will give a presentation on collecting data on the effects of multimedia presentations on student learning and on embedding and sharing Web 2.0 programs for students to review outside of the classroom. Teachers will use the majority of the workshop time to work collaboratively with group members to create a 30 minute multimedia presentation covering the 3 principles that will be presented during the last workshop.</p>		
Lesson Objectives: <ul style="list-style-type: none">• Given a detailed presentation using the Multimedia, Contiguity and Modality Principles, teachers participating in the fourth day’s workshop will identify and discuss as a group 10 specific benefits to following the principles covered during the workshop.• Using either VoiceThread, Prezi, PhotoPeach, PowToon or Emaze,, teachers will work collaboratively in small groups to create a 30 minute multimedia lesson on a content-specific topic that exhibits the Multimedia, Contiguity and Modality Principles.		

Workshop Delivery:

- The workshop will begin a review of the Contiguity Principle and the Multimedia Principle. The workshop presenter will deliver a review of the main concepts from the previous workshop by delivering slide examples from presentations made during the first day's session by teacher participants.
- The presenter will review the post-workshop survey results from the second day's workshop. The presenter will hold discussion on any lingering questions or problems identified in the survey.
- Teachers will share how they have been using the lessons learned from the first day sessions of the workshops. Teacher volunteers will present examples of presentations they have created since the first workshop, emphasizing how they have incorporated the Multimedia, Contiguity Principles and Modality Principles.
- The Master Teacher will give a quick presentation of a lesson he/she successfully designed and delivered to a class within the past 6 months. Teachers will work collaboratively in groups to discuss and identify 3 specific ways in which the Master Teacher's presentation successful uses the Multimedia, Contiguity and Modality Principles. Groups will report and discuss their findings.
- Working in groups of 2-3 each, teachers will collaboratively plan and prepare a 30 minute lesson that incorporates the 3 multimedia principles learning during the course of the workshop sessions.
- Teachers will complete a post-workshop survey available online to assess knowledge gained through the workshop and provide effective feedback for the upcoming session.

Additional Materials:

- An interactive whiteboard or Promethean board should be available to display the interactivity of the presentation software.
- Google forms for the pre-workshop, mid-workshop and post-workshop surveys should be prepared and either emailed out before the workshop begins or during the appropriate sections of the workshop.
- A wiki page or website for the workshop will be prepared ahead of time for teachers to follow along and maintain focus on specific workshop sections, expectations and timelines.
- Headphones for teachers to listen to audio presentations.
- Microphones for teachers who may have nonfunctioning or improperly functioning microphones.

Workshop Evaluation Strategies

- All teachers will be required to submit a post-workshop survey to identify learning, effective progress and necessary changes or additions to the workshops
- Teacher groups will be required to submit a tangible proof of concept at the end of the session. This submission should be a link to the location of the presentation created at the end of the session, with a clearly identified explanation of how the presentation fits the 3 principles covered during the previous sessions.
- The workshop presenter and Master Teachers should keep an accurate record of the type of questions asked, and the responses/assistance given during the session.

Technology Workshop Lesson Plan		
Instructor: Samuel Cook	Powering Up Presentations with Presentation Software	Day: Five
Subjects: <ul style="list-style-type: none">• Presentation of knowledge and experience through collaborative group presentations	Prerequisites Knowledge: <ul style="list-style-type: none">• Attendance to all previous sessions.• A basic understanding of Web 2.0 programs.• Knowledge of basic computer functionality.• Post-workshop surveys from day and two sessions should have been completed.• Working knowledge of the Multimedia Principle, Contiguity and Modality Principles.	
Workshop Content: <p>During this session, teacher groups will present their collaborative lessons began or created during day 4 of the workshop. Teachers will be expected to present a 30 minute lesson that includes presentations using the 3 Multimedia, Contiguity and Modality Principles, as well as using at least one of the Web 2.0 presentation software examples provided during the workshop. The workshop will conclude with a post-workshop survey and sign-ups for post-workshop observations and data gathering on workshop effectiveness.</p>		
Lesson Objectives: <ul style="list-style-type: none">• Given 30 minutes of floor time, teacher groups will use one at least of the Web 2.0 presentation tools to deliver a multimedia-infused lesson on a content-specific topic that covers identifiable examples of all 3 multimedia principles covered during the workshop.• Using an online survey provided by the workshop instructor, teacher participants will review the effectiveness of the 5 day workshop to show successful completing of the overall workshop goals.		
Workshop Delivery: <ul style="list-style-type: none">• Workshop participants will take turns presenting their group lessons. During each presentation, all teachers will take part in the activities. Teachers will be limited to 30 minutes for their lessons.• After all teacher groups have presented their lessons, workshop participants will constructively review the effective and ineffective methods employed in each of the group lessons presented.• Teacher participants will vote for a “best in show” lesson that they believe exhibited the principles learned during the workshop to the greatest effect.		

Additional Materials:

- An interactive whiteboard or Promethean board should be available to display the interactivity of the presentation software.
- Google forms for the pre-workshop, mid-workshop and post-workshop surveys should be prepared and either emailed out before the workshop begins or during the appropriate sections of the workshop.
- A wiki page or website for the workshop will be prepared ahead of time for teachers to follow along and maintain focus on specific workshop sections, expectations and timelines.
- Headphones for teachers to listen to audio presentations.
- Microphones for teachers who may have nonfunctioning or improperly functioning microphones.

Workshop Evaluation Strategies

- All teachers will be required to submit a post-workshop survey to identify learning, effective progress and necessary changes or additions to the workshops
- Teachers will be required to submit their group lessons as a tangible proof of concept at the end of the workshop.
- The workshop presenter and Master Teachers should keep an accurate record of the type of questions asked, and the responses/assistance given during the session.
- Workshop effectiveness will be evaluated through follow-up observations from workshop instructor and Master Teachers. Data will be collected on the effective use of the presentation tools and multimedia learning principles.

Supporting Materials Sample

[Pre-Workshop Survey available here as a Google form.](#)

Web 2.0 Presentation Software Pre-Workshop Survey

* Required

*Please enter your name. **

*What is your assigned grade level(s)? Choose all that apply. **

- ☐ ☐ Kindergarten
- ☐ ☐ 1st Grade
- ☐ ☐ 2nd Grade
- ☐ ☐ 3rd Grade
- ☐ ☐ 4th Grade
- ☐ ☐ 5th Grade
- ☐ ☐ 6th Grade
- ☐ ☐ 7th Grade
- ☐ ☐ 8th Grade
- ☐ ☐ 9th Grade
- ☐ ☐ 10th Grade
- ☐ ☐ 11th Grade
- ☐ ☐ 12th Grade

*What is your subject area? Choose all that apply. (6th-12th grade teachers only) **

- ☐ ☐ Not applicable (choose this if you are a K-5 teacher).
- ☐ ☐ English/Language Arts
- ☐ ☐ Math
- ☐ ☐ Science
- ☐ ☐ Social Studies
- ☐ ☐ Art
- ☐ ☐ Music
- ☐ ☐ Technology

- ☐ Other:

*How many years have you been teaching? (This means years total, including years taught outside of Prince George's County) **

- ☐ 0-1
- ☐ 2-3
- ☐ 4-5
- ☐ 5-6
- ☐ 7-8
- ☐ 9-10
- ☐ 11-12
- ☐ 13-14
- ☐ 15+

*Identify your comfort with using presentation software in the classroom using the scale below. **

1 2 3 4 5 6 7 8 9 10

I have never or
rarely used
presentation
software in
classroom



I use presentation
software of some
variety daily.

*Of the following presentation software options, which have you used at least once? **

- ☐ PowerPoint
- ☐ Keynote
- ☐ Prezi
- ☐ Emaze
- ☐ PowToon
- ☐ Animoto
- ☐ Google Presentation
- ☐ VoiceThread
- ☐ PhotoPeach
- ☐ Other:

*Of the following Web 2.0 presentation software options, which are you most interested in learning to use? **

(Check all that apply)

- ☐ Prezi
- ☐ Emaze
- ☐ PowToon
- ☐ Animoto
- ☐ Google Presentation
- ☐ VoiceThread
- ☐ PhotoPeach

*Is there any reason you may not be able to attend all 5 workshop sessions over the course of the next 3 months? **

*Please describe a little about your personal interest in attending this workshop. **

Field Testing

The 5 day workshops will be designed to take place over the course of 5 days. The workshop sample given above will take place on 5 non-consecutive days, with 5 hours given to each session. We will hold 4 of these workshops during the year, one each quarter, and teacher participants will be required to meet once every other week on a Saturday for the 5 hour sessions. Before we implement these workshops, some field testing will be required. There are several steps that should be taken for this field testing.

Step 1: Pre-field test interest survey

We will create and send out an interest survey to gauge whether teachers would be interested in the workshop concept.

Step 2: Select Master Teachers for a 1-day test workshop

We will have principals from each school identify 1-2 teachers who they believe are masters of the workshop's specific content. These teachers will be asked to attend a 1 day, paid test workshop.

Step 3: Master Teacher evaluations and input

We will have the Master Teachers attending the test workshop to evaluate the effectiveness of the workshop's content and give suggestions for content that they believe should be covered, content that should be removed, and add suggestions on delivery methods. Master Teachers will do this through on-going commentary during the test workshop as well as post-workshop surveys.

Revisions:

The purpose of the field test will be to ensure that we are able to provide our teachers with an effective, interesting workshop experience that will build lasting interest in the content and continued usage of the workshop material and skills. Using the Master Teacher feedback, we will change the delivery methods and content as necessary. Because we will be utilizing teachers to do the field test, it should ensure that our content is not only relevant, but usable for all teachers across all grade levels and skill levels.

Post-Workshop Summative Evaluation

One of the primary goals of our technology skills workshops should be to ensure that we are not simply giving our teachers a theoretical survey of best practices in technology. We must aim to encourage our teachers that using the technologies and skills presented during the workshop will ultimately be beneficial for their students, first and foremost, and for themselves as professional educators. The best means of ensuring that our workshops are having the necessary effects on the classroom is to implement on-going follow-up with the teachers that are involved in the workshops, as well as on-going revisions to the workshops throughout the school year. Perhaps the most effective way of doing this is by having volunteers from the workshops to participate in follow-up classroom observations and post-workshop discussions to evaluate the effectiveness of the skills learned at the workshop and the technology used as a result. Some possibilities to consider are outlined below.

- **Conduct post-workshop, in-class observations of workshop participants.**

This will be our most useful strategy for collecting data on the long-term effectiveness of our workshops. We should identify and follow-up with no less than one third of our workshop participants from each quarter.

- **Conduct post-workshop surveys of all teacher participants.**

As part of a requirement for workshop payment, all teacher participants will be required to submit a post-workshop survey that includes the submission of materials created as a result of skills learned during the workshop. This should ensure that teacher participants are actively engaged in the workshop's goals.

- Use workshop participants as Master Teachers for each consecutive series of workshops. Using participants from previous workshops as Master Teachers should ensure that the information in our workshops remains relevant, and that the camaraderie among teachers remains strong. Teachers are most engaged when guided by those with equal standing and experience.

As stated, our primary goal should be to ensure that our workshops are relevant enough that teachers actively utilize the skills learned after completing the workshops.

Effectiveness Evaluation

A lingering question for all workshops is, was our workshop successful? Are teacher participants using what they have learned? Has our investment in workshops been worth the expense?

Following the aforementioned summative evaluations should be an effective way of ensuring that our workshops were successful. However, it is important that we gather hard data on the effectiveness of our workshops as well. Before and after the workshops begin, we must gather data from each teacher on different aspects of their classes. This should include, but not be limited to, each of the following items:

- Student participation rates
- Student behavior data
- Test scores
- Homework assignment scores
- Homework assignment completion rates
- General student interest in lessons

This data should be collected from all teacher participants no less than 2 weeks prior to their attendance to the workshops. Teachers should independently gather this data before their attendance to the workshop, and gather the same data several weeks after the workshop is over and after they have been implementing the skills and technologies learned during the workshop. In this way, we can accurately summarize what, if any, effect our workshops are having on our students.

Projected Costs for 5 Day Workshops

Workshop	Cost Per Teacher	Total Teacher Cost	Cost per Instructor	Total Instructor Cost	Total Workshop Cost
Putting the “Interactivity” in Interactive Whiteboards (5 day course)	\$625 @ 25/hr for 25 hours	\$75,000 (120 teachers per year)	\$1,000 @ \$40/hr for 25 hours	\$4,000 @ \$1,000 each for 4 workshops per year	\$79,000
Powering up Presentations with Web 2.0 Presentation Software (5 day course)	\$625 @ 25/hr for 25 hours	\$75,000 (120 teachers per year)	\$1,000 @ \$40/hr for 25 hours	\$4,000 @ \$1,000 each for 4 workshops per year	\$79,000
Getting the Most from Google Docs (5 day course)	\$625 @ 25/hr for 25 hours	\$75,000 (120 teachers per year)	\$1,000 @ \$40/hr for 25 hours	\$4,000 @ \$1,000 each for 4 workshops per year	\$79,000
Getting the Most from Google Docs (5 day course)	\$625 @ 25/hr for 25 hours	\$75,000 (120 teachers per year)	\$1,000 @ \$40/hr for 25 hours	\$4,000 @ \$1,000 each for 4 workshops per year	\$79,000

Mobile Technology in the 21 st Century Classroom (5 day course)	\$625 @ 25/hr for 25 hours	\$75,000 (120 teachers per year)	\$1,000 @ \$40/hr for 25 hours	\$4,000 @ \$1,000 each for 4 workshops per year	\$79,000
Getting to Know the Acceptable Use Policy (1 day course)	\$0 (course taken during pre-service week)	\$0	\$0	\$0	\$0
Telling a Good Story: Using Technology to Tell Unique Stories (5 day course)	\$625 @ 25/hr for 25 hours	\$75,000 (120 teachers per year)	\$1,000 @ \$40/hr for 25 hours	\$4,000 @ \$1,000 each for 4 workshops per year	\$79,000
Always On: How Learning Management Software Take us Beyond the Four Walls (5 day course)	\$625 @ 25/hr for 25 hours	\$75,000 (120 teachers per year)	\$1,000 @ \$40/hr for 25 hours	\$4,000 @ 1,000 each for 4 workshops per year	\$79,000

Total Workshop Cost: \$553,000

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